

Childhood Obesity

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Objective: The aim of this study is to determine the extent of childhood obesity that has increased globally in our age and to give information about prevention studies.

World Health Organization is defined as abnormal or excessive fat accumulation, which overweight and obesity can impair health in the body. Childhood obesity is one of the most important problems faced by children in the 21 st century. Obesity problem is experienced especially in underdeveloped and developing countries. Globally, the number of overweight children under the age of five is estimated to be over 41 million. The prevalence of obesity in our country is increasing day by day. According to Turkey Nutrition and Health Survey; Overweight at 0-5 years of age was 17.9% and overweight and obese were 26.4%; In the age group 6-18, overweight and overweight were found to be 14.3% and 22.5%, respectively. Turkey between 6-11 years in 3963 in a study with children and parents; 11.1% of the children were overweight and 7.5% were obese.

Childhood obesity, which is associated with genetic factors, sedentary life and malnutrition habits, brings with it various health and economic problems. It is stated that individuals with childhood obesity are prone to chronic diseases in adulthood and have chronic disease at an earlier age than other individuals. The treatment of this problem which affects the health of individuals negatively requires cost and time.

In terms of noncommunicable diseases, childhood obesity is a preventable problem. Therefore, prevention of childhood obesity should be started from perinatal period. It is stated that the proper nutrition of the fetus in the womb, the baby in the postnatal period and the child in the school period are important in preventing childhood obesity. Therefore, children, families and individuals interacting with the child; training and awareness raising activities on healthy nutrition and physical activity issues are important.

Keywords: *Childhood, Obesity, Protection*

INTRODUNTION

Definition and Determination of Obesity in Children

Obesity is a condition that occurs with increased fat tissue in cases where energy intake is higher than energy consumption (Ergül & Kalkım, 2011). The World Health Organization (WHO) has defined excess weight and obesity as abnormal or excessive fat accumulation in the body, which disrupts health (WHO 1998). Fat tissue increases in the body, especially in infancy and puberty (Günöz et al 2002). WHO's Body Mass Index (BMI) calculation is most commonly used to determine obesity. Accordingly, BMI; it is obtained by dividing the body weight (kg) of the individual by the square of his height (in m) ($BMI = kg / m^2$) (WHO 2019). In the determination of obesity in children and adolescents, a different application is applied than the calculation method of adults. In this group, percentile or z score values are used to determine obesity (WHO 2007). In addition, the BMI of individuals aged 2-19 years is calculated by the Center for Disease Prevention and Protection using age, sex, body weight and height (CDC 2019).

Epidemiology of Obesity in Children

Obesity is an important public health problem that concerns all countries of the world. It is increasing day by day in both developed and developing countries. Childhood obesity is considered a very serious problem by WHO in the 21st century (WHO 2019). According to the

results of the National Nutrition and Health Survey conducted in the United States in 2015-2016, the prevalence of obesity was 42.8% in middle-aged adults, 13.9% in children aged 2-5 years, 18.4% in children aged 6-11 and 20.6% in adolescents aged 12-19 years. It has been identified (NHANES, 2017). WHO states that 41 million children under five years of age and 340 million children aged 5-19 years and adolescents are obese or overweight (WHO 2018). Considering the prevalence of obesity in our country, Turkey Nutrition and Health Survey (2010); overweight and obese were 26.9% and 17.9%, respectively; overweight and obese were found to be 14.3% and 22.5% in the 6-18 age group (Sağlık Bakanlığı, 2014). In a study conducted with primary school students in Sakarya, 13.9% of the students were obese and 14.2% were overweight (Önsüz et al., 2011). It was determined that 10.4% of Kastamonu 10-12 age group primary school students were overweight and 1.3% were obese (Metinoğlu, Pekol, & Metinoğlu, 2012). In a study conducted in Ankara, 11.1% of children were overweight and 7.5% were obese (Savaşhan et al., 2015). The incidence of obesity was found to be 15.7% in both children whose parents were obese (Savaşhan et al., 2015).

Causes of Obesity in Children

When the causes of obesity are evaluated, many factors appear. These are inheritance, gender, ethnicity, sedentary lifestyle, lack of physical activity, eating habits and environmental factors (Taveras et al 2013, Kelishadi and Poursafa 2014). The obesogenic environment is also responsible for the occurrence of obesity. Obesogenic environment; It is defined as the conditions in which the living conditions and the environment encourage the individual to obesity, including excessive eating and immobility. Obesogenic factors include large portions of foods containing high levels of fat and sugar. Since these foods are processed in high amounts, they cause a high level of hunger and cause obesity in children (Yayan & Çelebioğlu, 2018). The daily consumption frequency of ready-to-eat products increased with the change in the living conditions of the society and the entry of women into the working life. Especially with social media, children's interest in this kind of food is increasing. It is stated that families do not behave consciously on this issue (Hamşioğlu 2013). With the developing technology, limiting the mobility of children and changing their feeding habits and food preferences cause obesity (Alpcan & Durmaz, 2015). In a study, obesity was found to be higher in those who had obese individuals in their family, who consumed chocolate and chips, those who had less activity, and those who were pressured to eat by their mother (Metinoğlu et al., 2012). It is stated that time spent with television, video games and computer in children is associated with obesity (Yavuz & Tontuş, 2013), (Epstein et al. 2008). It is reported that maternal malnutrition habits cause childhood obesity (Dubois and Girard 2006) and that BMI increases significantly as the duration of breastfeeding decreases (Yılmaz, Özyayın, Demirel, & Köse, 2016). Studies have shown that short sleep time in infants, children and adolescents is associated with the development of obesity (Liu et al. 2008). It has been found that there is a relationship between eating at night and eating obesity (Önsüz et al., 2011).

Treatment of Obesity

Childhood obesity; diabetes mellitus, hypertension, heart disease, stroke, cancers, diseases of the digestive system are reported to be associated with increased diseases (Yavuz & Tontuş, 2013). Obesity, which causes many health problems in children, is a preventable disease. Basic strategies for the prevention of childhood obesity; dietary regulation, increasing physical activity and exercise appropriately, reducing the time spent with sedentary activities such as watching television and changing behavior (Yavuz & Tontuş, 2013). Another way to prepare school-age children for the future as healthy individuals is to give them a more traditional diet. Consuming traditional foods such as yoghurt, molasses, bulgur, pickles and under-processed or unprocessed foods during school age will provide a healthier and balanced diet (Karakaş & Törnük, 2016)

Three strategies for obesity prevention are proposed. First; Nutritional habits starting from intrauterine period should be continued after birth. It is important to adopt proper nutrition and physical activity behaviors during infancy and childhood. In secondary protection; health screening and periodic examinations for early diagnosis and intervention. Thirdly; obesity-related health problems emerge and include tertiary weight management clinics in multi-faceted interventions (Tarakçı, Hüseyinsinoğlu, & Çiçek, 2016). Nurses have a significant impact on the protection and development of the health of the groups they are interested in. It is very important for nurses to educate children and families about nutrition and physical activity, starting from neonatal period to adolescent period (Erdim, Ergun, & Kuğuoğlu, 2014)

CONCLUSION

Since childhood obesity causes adulthood obesity and paves the way for many chronic diseases, it is important to start preventive approaches from the early period. Obesity, which is rapidly increasing in the world, is an important social problem affecting individuals and societies and it is important to address this issue by those working in primary health care. In the fight against childhood obesity, it is important to inform families about adequate and balanced nutrition, physical activity and obesity. Encouraging the consumption of low-fat, sugary and salty traditional foods will be healthier for childhood. Since childhood obesity is a serious health and economic problem, it is important to provide holistic education and awareness to children and parents about the importance of healthy nutrition and physical activity in order to prevent this problem. It is considered necessary to take initiatives to improve the healthy lifestyle behaviors of mothers towards their children.

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